

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A method for error protection of a cache memory, wherein each entry in the tag memory and a data store within the cache memory associates with a parity bit, comprising:

- (a) providing a read request to a system memory associated with the cache memory, the read request correlating to an entry in the tag memory and the data store;
- (b) checking the parity bit associated with the correlated entry in the tag memory and the parity bit associated with the correlated entry in the data store; and
- (c) if either act (a) or act (b) indicates an error in the corresponding correlated entry, declaring a miss; and
- (d) invalidating the correlated entry in the data store if a miss is declared in act (c).

Claim 2 (original): The method of claim 1, wherein the cache memory is a second level cache.

Claim 3 (canceled).

Claim 4 (original): The method of claim 3, wherein act (b) comprises:

- checking the parity bit associated with the correlated entry in the tag memory; and
- if the parity bit associated with the correlated entry in the tag memory indicates no error:
  - determining if the correlated entry in the tag memory indicates a hit; and
  - if there is a hit, checking the parity bit associated with the correlated entry in the data store.

Claim 5 (original): The method of claim 4, further comprising:

if the parity bit associated with the correlated entry in the data store indicates no error, retrieving the correlated entry from the data store.

**Claim 6: (original):** The method of claim 5, wherein the retrieving the correlated entry from the data store act comprises retrieving the data line containing the correlated entry.

**Claims 7 to 12 (canceled).**